

REMARKS

Claims 103-151 are presently pending in the application.

In paragraphs 1 and 2 of the Office Action, the Examiner has objected to the drawings and the specification for failing to include reference numerals 8' and 9' in the drawings or the specification, although they appear in the original and previously pending claims. Accordingly, Applicants have amended the specification and the drawings to insert reference numerals 8' and 9' at page 14 of the specification and in Fig. 4a of the drawings. Since the core 8' and covering 9' are analogous to the core 8 and covering 9 in Fig. 1 and the core 8" and covering 9" in Fig. 5, it is submitted that no new matter is being added by these amendments. Accordingly, entry of the amendments and reconsideration and withdrawal of the objections are respectfully requested.

At paragraph 3 of the Office Action, the Examiner has rejected claims 52-102 under 35 U.S.C. § 112, second paragraph, as being indefinite with respect to the terms "a/the specific compound" which appears in several of the claims. Claims 52-102 have been rewritten as new claims 103-151, as discussed below. The new claims do not use the term "specific compound," but instead refer to an "ionic compound" and a "covering compound," both of which are appropriately defined in the claims. Accordingly, the rejection under 35 U.S.C. § 112 is moot, and reconsideration and withdrawal of the rejection are respectfully requested.

Claims 52-102 have been rewritten as new claims 103-151 in order to emphasize two important features of the tablet composition of the present invention, namely (1) a particle core being coated with a covering whose dissolution is inversely proportional to ionic strength and (2) the partial contact between the particle and the tablet. These features are supported, for example, in the original claims and at page 10, paragraph 2, and the discussion of the preferred embodiment at pages 10-12 of the specification. Accordingly, no new matter has been added, and entry of the amendments is respectfully requested.

Feature (1) causes the delayed dissolution of the core/cores until the ionic strength of the first addition water has reached a certain level. Feature (2) describes the arrangement of the particle (the coated core) and the tablet. It is to be noted that the particle is only partially in direct contact with the area of the tablet surrounding same. That is, only a portion of the surface

area of the particle contacts the surface area of the part of the tablet surrounding the core.

Feature (2) has several important implications as described in the specification on, for example, page 12. The principle advantage is connected with the manufacturing process.

In typical manufacturing processes tablets are formed by compression of a particulate powder in a mold with the compression pressure being sufficient to cause the powder to agglomerate. In order to enhance desirability of the tablet or to accommodate antagonistic components within the tablet, the tablet is commonly divided into a number of separate zones. One way to achieve this segregation is to form a pre-prepared particle, which can be prepared by powder compression, molding or any convenient technique, and then to combine this pre-prepared particle with the powder formulation. Here it is common practice to simply add the pre-prepared shape to the compression mold with the powder for the remainder of the tablet. In this way the pre-prepared shape is retained in the finished tablet by adherence to the compressed powder form, yet the pre-prepared shape is still visible from a surface of the tablet.

As typical compression pressures are of the order of 6 to 10 MPa, the pre-prepared particle is subjected to significant detrimental abrasive and compression forces during the compression step. These forces are particularly relevant where the particle has a sensitive coating which is required to enable the particle to perform its function effectively at a particular part of a wash cycle. In a preferred embodiment of the present invention, since the particle only partially directly contacts the surface of the tablet which surrounds the particle, the extent of the detrimental forces described above is minimized. This means that the integrity of the particle coating is preserved. In the context of the preferred embodiment, this has the effect that any damage to the particle coating is minimized, thus the integrity of the particle coating, which delays the dissolution of the particle core, is largely maintained, ensuring that the core is delivered to the wash cycle at the correct time. All of this can be achieved while surprisingly having no detrimental effect on the bonding of the particle to the tablet.

The arrangement of the particle relative to the tablet (partial direct contact) has a further advantage of preserving the integrity of the particle coating and storage. This is an important consideration, since typical tablet components create a chemically harsh environment for the coating. The reduction of contact between the particle and the tablet has the effect of reducing

potential detrimental interaction between the particle coating and the tablet components, while still affording sufficient bonding between a tablet and particle.

The Examiner has rejected previous claims 52-54 and 75-79 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,801,636 of Smith et al. ("Smith"). The Examiner contends that Smith teaches articles of manufacture 10', in the form of microcapsules of polymeric material 16' which enclose a comminuted wash additive 14'. The Examiner relies upon a particularly preferred embodiment of Smith which includes a mixture of perborate bleach including sodium carbonate and sodium perborate, which would dissolve in the wash portion of the wash cycle, raising the pH and providing borate and ions. The Examiner contends that the aqueous liquid present during the wash portion of the cycle is at a relatively high pH which significantly retards film dissolution and prevents release of the additive during the wash portion. During the rinse portion of the wash cycle, the pH drops markedly and the borate concentration is very significantly reduced, solubilizing the polymeric material and releasing the additive. The wash additive may be substantially surrounded by the polymeric material and may include various types of dishwashing agents. The Examiner concludes that Smith teaches the limitations of the rejected claims and therefore anticipates the claims.

The Examiner has rejected claims 55-57 under 35 U.S.C. § 103(a) as being unpatentable over Smith, as applied above, and further in view of U.S. Patent 5,360,567 of Fry et al. ("Fry"). The Examiner acknowledges that Smith fails to disclose the composition in tablet form. However, the Examiner contends that Fry teaches a similar heavy duty detergent composition in tablet form wherein the tablet offers several advantages over powdered products, in that the tablet does not require measuring, is easier to handle and dispense into the wash load, and is more compact and economical to store. The Examiner concludes that it would have been obvious to one skilled in the art at the time of the invention to prepare the composition of Smith in tablet form because of the above advantages over powdered products. These rejections are respectfully but strenuously traversed for the reasons set forth in detail below.

In rewriting claims 52-102 as new claims 103-151, the subject matter of claims 53 and 55 was essentially incorporated into claim 52 to create new independent claim 103. Therefore, the rejection of the claims under 35 U.S.C. § 102(a) as being anticipated by Smith is moot.

However, the Smith reference is discussed below in connection with the rejection of claims 55-57 under 35 U.S.C. § 103(a) over Smith in view of Fry.

In addition to failing to teach a composition in the form of a tablet, as acknowledged by the Examiner, Smith fails to teach or suggest feature (2) as discussed above, namely that the particle is only partially in direct contact with the area of the surrounding tablet, so that only a portion of the surface area of the particle contacts the surface area of the tablet surrounding the core. As a result, Smith lacks the advantages discussed above and does not anticipate the presently pending claims.

Even assuming that one skilled in the art would be motivated to combine the teachings of Smith and Fry, which Applicants do not necessarily agree, the combination still fails to teach or suggest the presently claimed invention. In particular, the combination still fails to suggest feature (2) as discussed above, namely that the particle is only partially in direct contact with the area of the surrounding tablet. Accordingly, the combination of Smith and Fry does not recognize, contemplate or achieve the advantages of the present invention, as discussed above.

Indeed, Fry is more concerned with the particle size of the tablet components. Fry fails to make any reference to any special arrangement of the tablet components, let alone the arrangement as presently claimed. Therefore, Fry fails to make up for the deficiencies of the Smith reference. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

The Examiner has also rejected claims 52-56, 66-69 and 75-79 under 35 U.S.C. § 102(a) as being anticipated by international publication WO 99/27067 of Speed et al. ("Speed"). The Examiner notes at the end of this rejection that Applicants cannot rely upon the foreign priority papers to overcome this rejection, because a translation of the papers has not been made of record. Accordingly, there is submitted herewith a Verified English Translation of German priority document DE 198 34 178.4. As can be seen from a cursory review of this translation, it is substantially identical to the international application of which the present application is the U.S. National Phase. Accordingly, the present claims are clearly supported by the German priority document. Since the German priority date of July 29, 1998 predates the effective prior art date of Speed, Speed is not available as a prior art reference under 35 U.S.C. § 102(a) or any

other section of the Patent Statute. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Finally, the Examiner has provisionally rejected all of the previous claims under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 40-76 of copending Application No. 09/509,642; claims 93-134 of copending Application No. 09/744,723; claims 50-96 of copending Application No. 09/744,724 (since this is the present application, it is believed the Examiner meant to say Application No. 09/744,726); claims 85-126 of copending Applicant No. 09/744,727; and/or claims 1-45 of related U.S. Patent No. 6,514,429. The latter rejection is not a provisional rejection, in view of the issuance of the patent. The Examiner acknowledges that a timely filed Terminal Disclaimer in accordance with 37 C.F.R. § 1.321(c) would overcome the obviousness-type double patenting rejections, providing that common ownership is shown.

While not necessarily agreeing with the Examiner's obviousness-type double patenting rejections or the reasons in support thereof, Applicants submit herewith a Terminal Disclaimer and Statement of Common Ownership with respect to each of the four related copending applications and one issued patent referred to in the rejections. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

In view of the above amendments and remarks, it is submitted that all of the claims in the application fully comply with the requirements of 35 U.S.C. § 112 and patentably distinguish over the prior art of record. Reconsideration and an early Notice of Allowance are respectfully solicited.

Application No. 09/744,724

Reply to Office Action of September 12, 2003

Respectfully submitted,

GUIDO WAESCHENBACH ET AL.

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Enclosures: Petition for Extension of Time (three months), Terminal Disclaimer and Statement of Common Ownership, Terminal Disclaimer Transmittal Letter and fee; Verified English Translation of German priority document; Formal drawings, sheet 2/2